

REMARKS

Claims 1 to 8 and 20 to 29 are pending. Claims 1, 20 and 26 are independent.

Favorable reconsideration and further examination are respectfully requested.

Initially, the specification has been amended to add a paragraph describing the application's priority.

Next, claims 1 to 8 were rejected under §112 for the reasons noted on pages 4 and 5 of the Office Action. As shown above, the claims have been amended. With respect to the rejection on page 5, it is noted that we no longer claim a fuel cell assembly, but rather an "assembly for a fuel cell". A fuel cell is therefore not an essential element of the claims.

Withdrawal of the §112 rejections is respectfully requested.

Claims 1, 2 and 6 to 8 were rejected over U.S. Patent No. 6,066,408 (Vitale) in view of U.S. Patent No. 6,303,245 (Nelson); and claim 2 to 5 were rejected over Vitale and Nelson in view of U.S. Patent No. 5,998,054 (Jones).

Independent claim 1 is shown below.

1. An assembly for a fuel cell, comprising:  
a fluid flow field plate having field plate channels in a surface of the fluid flow field plate that extend across the surface in a predetermined pattern;  
a distribution foil having distribution channels formed in a surface thereof, each distribution channel extending from a first edge of the distribution foil to a second edge of the distribution foil, each of the distribution channels terminating at the second edge at different positions, each of the different positions being substantially coincident with, and in direct fluid communication with, a respective field plate channel, the distribution channels providing water injection points for the field plate channels and enabling delivery of water directly into corresponding field plate channels at the water injection points; and  
a cover foil extending over the distribution foil to enclose the distribution foil channels and thereby form conduits for water between the distribution foil and the cover foil.

The applied art is not understood to disclose or to suggest at least the underlined portions of claim 1 above. As previously explained, Vitale discloses a humidification plate 202 having a channel 206 for mixing cathode gas and water to humidify a gas stream.

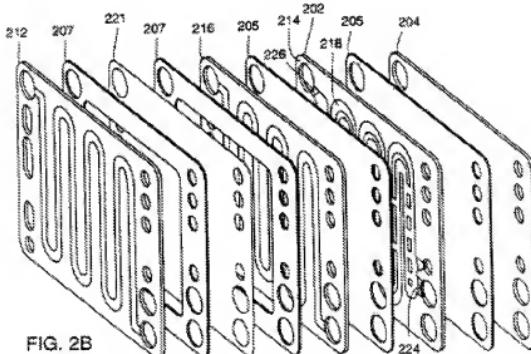
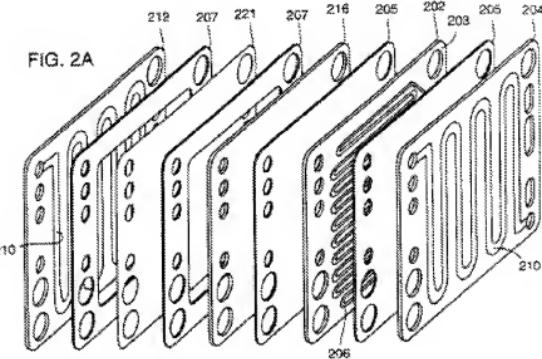
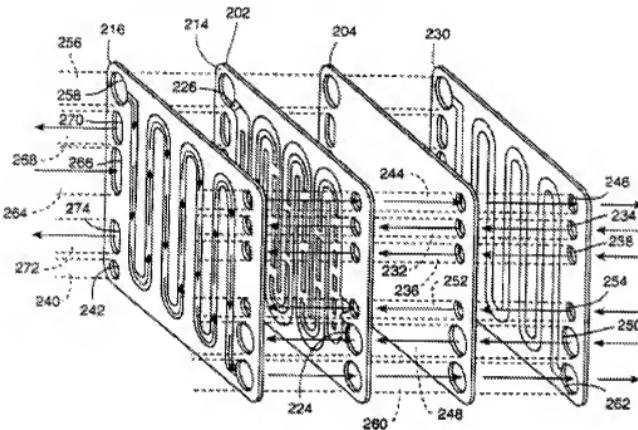


Plate 202 delivers humidified gas to a single exit point 226, from which the humidified gas is delivered via hole 258 to cathode flow plate 216, as shown in Fig. 2C below.

FIG. 2C



The Office Action equates 224 above to the claimed first edge and 226 above to the claimed second edge.<sup>1</sup> Between 224 and 226 is a single fluid flow channel, humidification channel 218<sup>2</sup>. By contrast, claim 1 now recites that there are plural "distribution channels", which terminate at the second edge at different positions. As shown in the figures above, in Vitale, the distribution channel terminates at 226, i.e., a single position.

The Office Action also states the following:

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<sup>1</sup> See Office Action, page 7

<sup>2</sup> Vitale, col. 5, line 65

[218] and bride passage [224]) (fig. 2C, fig. 3). It can be seen in fig. 2C that the channels of the cooler-humidifier plate [202] are coincident with those of the cathode flow plate [216]. The embodied material for the cooler-humidifier plate [202] is stainless <sup>3</sup>

We note, however, that, in Vitale, there is only one termination point, namely 226, which corresponds to single termination point, namely hole 258 of cathode plate 216. By contrast, claim 1 recites that “each of the different positions [are] substantially coincident with, and in direct fluid communication with, a respective field plate channel, and that the distribution channels [provide] water injection points for the field plate channels and [enable] delivery of water directly into corresponding field plate channels at the water injection points”. These features are not understood to be disclosed or suggested by Vitale.

Nelson, which was cited for its alleged disclosure of a foil, is not understood to disclose or to suggest anything that would remedy the foregoing deficiencies of Vitale vis-à-vis claim 1. Accordingly, claim 1 is believed to be patentable.

New independent claims 20 and 26 recite:

20. ...each different second position being substantially coincident with, and in direct fluid communication with, a respective field plate channel, the distribution channels for providing water injection points for the field plate channels and enabling delivery of water directly into corresponding field plate channels at the water injection points...

26. ..., each different second position being substantially coincident with, and in direct fluid communication with, a respective field plate channel, the water conduits providing water injection points for the field plate channels and enabling delivery of water directly into corresponding field plate channels at the water injection points...

These features are almost identical<sup>4</sup> to the feature underlined in claim 1, and upon which we base our arguments for patentability of that claim. Accordingly, the independent

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<sup>3</sup> Office Action, page 7

claims are believed to have unity of invention under PCT standards, which is defined in PCT Rules 13.1 and 13.2, as follows:

Where a group of inventions is claimed in one and the same international application, the requirement of unity of invention referred to in Rule 13.1 shall be fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. The expression "special technical features" shall mean those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art. (emphasis added)

In this regard, claims 20 and 26 are also believed to be patentable for at least the same reasons explained above for claim 1.

Dependent claims are also believed to define patentable features. Each dependent claim partakes of the novelty of its corresponding independent claim and, as such, each has not been discussed specifically herein.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

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<sup>4</sup> Due to the structure of the claim language, the wording is not wholly identical among claims 1, 20 and 26.

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In view of the foregoing amendments and remarks, we respectfully submit that the application is in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

The undersigned attorney can be reached at the address shown below. All telephone calls should be directed to the undersigned at 617-521-7896.

Please apply any fees or credits due in this case to Deposit Account 06-1050 referencing Attorney Docket No. 17638-005US1.

Respectfully submitted,

January 22, 2010  
Date: \_\_\_\_\_

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